

REMARKS/ARGUMENTS

Claims 14-33 are active in this application. The claims have been amended for clarity. No new matter is added by these amendments.

The present invention is based on the preparation of a sports drink comprising viable lactobacilli which have a positive effect on human intestinal mucosa (for example, see Claims 14 and 15). As described in the application on page 3, "It has now been surprisingly been shown that viable lactobacilli can be mixed with micronutrients, carbohydrates, salts and proteins, without negative effects on e.g. antioxidants, to a beverage having a good taste and a good shelf-life." In addition, the claims provide the use of this sports drink for treating stress symptoms, gastrointestinal disturbances and lesions of the mucosal membrane of the intestine.

The claimed invention is not described in the cited prior art for the following reasons.

All of the rejections under 35 U.S.C. § 103(a) are based on or centered around U.S. Patent No. 5,907,7432 to Luchansky et al. However, Luchansky et al. describes a beverage containing Bifidobacterium and contrary to the position taken by the Patent Office Bifidobacterium are NOT the same as Lactobacillus.

For the Examiner's reference, Applicants enclose herewith an article by Schleifer and Ludwig (System. Appl. Microbiol. 18, 461-467 (1995)) which clearly shows that Lactobacillus belong to the Clostridium branch which consists of gram-positive bacteria with a low DNA G+C content whereas Bifidobacterium are part of the Actinomycetes branch which are gram-positive bacteria with high DNA G+C content. In particular, Applicants draw the Examiner's attention to Figure 2 where it is quite clear that Lactobacillus and Bifidobacterium are significantly different within the lactic acid bacteria phylogeny.

Furthermore, in the attached article from Temmerman et al. (International Journal of Food and Microbiology, 81 (2002) 1-10) it is reported that Bifidobacterium in probiotic

products have a particularly short shelf life. In fourteen dairy products which claimed to have Bifidobacterium, in only two instances were bacteria recovered (see page 5, column 2 and page 8, column 1).

Luchansky et al. simply provide no disclosure for formulating a sports drink containing viable lactobacilli as claimed nor is there any suggestion to do so. Thus, the rejection in view Luchansky et al. alone should be withdrawn.

In addition, the Office has combined Luchansky et al. with additional prior art, namely, WO98/46091, WO89/08405 and/or WO98/05343. However, these references relate to lactobacillus containing food for enteral nutrition but there is no suggestion in those references or in Luchansky et al. to replace the Bifidobacterium in Luchansky et al.

The sports drink of the present invention incorporates viable lactobacilli having a positive effect on human intestinal mucosa. As discussed on page 3 and supported by the Biological test data on pages 13-14 "It has now been surprisingly been shown that viable lactobacilli can be mixed with micronutrients, carbohydrates, salts and proteins, without negative effects on e.g. antioxidants, to a beverage having a good taste and a good shelf-life." The sports drink further has good taste and a long shelf life and thus is exceptionally good for providing a benefit to those individuals that are physically active.

As the cited prior art does not describe or suggest the claimed invention and the Examiner has not proffered any basis to conclude that the present invention would have been obvious, Applicants request that the rejections over Luchansky et al. combined with WO98/46091, WO89/08405 and/or WO98/05343 be withdrawn.

The rejection of Claims 25 and 33 as well as the rejection of Claim 25 under 35 U.S.C. § 112 or 35 U.S.C. § 101 have been addressed by amendment.

Application No. 09/926,586  
Reply to Office Action of July 18, 2003.

Applicants also request that the Examiner return an initialed and signed copy of the PTO form 1449 filed as an Information Disclosure Statement on February 14, 2002 in the next communication from the Patent Office. For convenience a copy of that IDS is attached.

Finally, Applicants request that this application be passed to issue.

Respectfully submitted,

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